

Serial No. 10/726,973
Attorney Docket No. 24170759.3

AMENDMENTS TO THE SPECIFICATION

(1) Please amend the paragraph beginning on page 5, line 20, and ending on page 6, line 11, as follows:

Also included on the base 10 is a first measuring device-20, which is comprised of two parts 20a, 20b. In an exemplary embodiment, the first part 20a is a linear measuring device, such as a ruler or similar device, configured to determine the location of the first carriage 12 with respect to the base 10. The second part 20b of the first measurement device is a linear indicator, for example, a vernier measuring device, positioned on the first carriage 12, to provide the indication of the location of the first carriage 12 along the linear measuring device. Using a vernier or other type of linear indicator is typically dependent upon the accuracy of a desired measurement. More specifically, a vernier device, which is a small but very accurate graduated ruler, can provide more accurate readings on the position than, for example, a simply measuring tape graduated to only 16th of an inch. By employing the combination of the first and second portions 20a, 20b, the first measurement device-20 can provide the accurate location of the first carriage 12 along the base 10, as well as provide the ability to place the first carriage 12 in, or return it to, a specific desired location.

(2) Please amend the paragraph beginning on page 7, line 17, and ending on page 8, line 7, as follows:

Also included on the first arm 22 is a second measuring device-32, similar to the first measurement device-20, and is also comprised of two parts 32a, 32b. In an exemplary embodiment, the first part 32a is a linear measuring device, such as a ruler or similar device, configured to determine the location of the second carriage 24 with respect to the first arm 22.

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The second part 32b of the second measurement device is also a linear indicator, for example, a vernier device, positioned on the second carriage 24 to provide an indication of the location of the second carriage 24 along the linear measuring device. As discussed above, the particular type of linear indicator employed may depend on the desired accuracy of measurement. As with the first measurement device, by employing the combination of the first and second portions 32a, 32b, the second measurement device can provide an accurate location of the second carriage 24 along the first arm 22, as well as provide the ability to place the second carriage 24 in, or return it to, a specific desired location along the first arm 22.

(3) Please amend the paragraph beginning on page 9, line 18, and ending on page 10, line 6, as follows:

Located on the handle 38 and associated with the second arm 34 is a third measurement device 40, which is also comprised of two parts 40a, 40b. Since the handle 38 in FIGURE 1 is rotated to pivot the second arm 34, the first portion 40a of the third measurement device may be a rotational measurement device, such as a dial, located on the handle 38. Consequently, the second portion 40b is again a linear indicator, such as a vernier device, but positioned on the second carriage 24 to provide an indication of the radial movement of the handle 38 (and thus the pivot of the second arm 34) with respect to the second carriage 24. Thus, the third measurement device 40 can provide the accurate location of the pivot of the second arm 34 with respect to the second carriage 24, as well as the ability to rotate the second arm 34 to (or back to, as the case may be) a specific desired position.

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(4) Please amend the paragraph beginning on page 11, line 20, and ending on page 12, line 13, as follows:

Also associated with the extending arm 44 is a fourth measuring device 52, which like the prior measurement devices is comprised of two parts 52a, 52b. In the illustrated embodiment, the first part 52a (not fully illustrated) is a linear measuring device, such as a ruler or similar device having one end fixed on the extending arm 44, and configured to determine the location of the extending arm 44 with respect to the second arm 34. The second portion 52b (also not fully illustrated) of the fourth measurement device may be another linear indicator, such as a vernier device, affixed on a side of the second arm 34, and provides an indication of the location of the extending arm 44 on the first part 52a of the fourth measurement device as the extending arm 44 slides along the z-axis. As with the prior measurement devices, by employing the combination of the first and second portions 52a, 52b, the fourth measurement device 52 can provide the accurate location of the extending arm 44 as it slides along the second arm 34, as well as provide the ability to place the extending arm 44 in, or return it to, a specific desired location. Furthermore, since the central shaft 46 is moving together with the extending arm 44, the measurement of the extending arm 44 is also the measurement of the location of the central shaft 46.

(5) Please amend the paragraph beginning on page 14, line 3, and ending on page 14, line 13, as follows:

Located on the handle of the fifth movement device 56, in the illustrated embodiment, is a fifth measurement device 64 associated with the extending arm 44. When employed with the positioning device 100, the fifth measurement device 64 determines the amount of rotation of the

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central shaft 46 about the γ -axis. As with some of the other measurement devices, the fifth measurement device 64 may be comprised of two portions 64a, 64b. Since in this exemplary embodiment the handle is spun to rotate the central shaft 46, the first portion 64a of the fifth measurement device may be a rotational measurement device, such a dial, located on that handle. Then, the second portion 64b, which is a vernier indicator in the illustrated embodiment, is positioned on the extending arm 44 to provide an indication of the rotation of the handle (and thus the rotation of central shaft 46 and tool holder 60).